

38. (Amended) a [gene] polynucleotide [or fragment thereof,] which codes for a [PS116] protein having an amino acid sequence with at least [50%] 70% identity to SEQUENCE ID 25.

B<sup>6</sup> 39. (Amended) A [gene] polynucleotide, [or fragment thereof,] comprising DNA having at least [50%] 70% identity with SEQUENCE ID NO 11 or SEQUENCE ID NO 12.

#### REMARKS

The Examiner states that the title of the invention is not descriptive and states a new title is required that reflects that the claimed invention is drawn to polynucleotide sequences. Applicant requests that this objection be held in abeyance until subject matter has been deemed allowable.

The Examiner states that the declaration is defective and a new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. Specifically, the Examiner states that the declaration is defective because "NONE" is listed with statement I hereby claim benefit under USC 120 or the following earlier filed U.S. patent application. Applicant is in the process of preparing a new declaration.

The Examiner states references lined through on the IDS filed June 19, 1998 have not been considered by the Examiner, as parent application 08/856,653 was unavailable to the examiner and invites Applicant to provide replacement copies. Thus, Applicant hereby submits the references from the IDS filed June 19, 1998.

Claims 10-16, 25, 30, 33, 35 and 38 are rejected under 35 U.S.C. § 112, second paragraph. Specifically, claim 10 is vague and indefinite in the recitation "useful for detecting PS116 polynucleotides in a test sample", according to the Examiner. The Examiner also states that the following recitations are vague and indefinite; "PS116 polynucleotide" (claims 10 and 33), "PS116 gene" (claim 11), "PS116 epitope" (claims 14, 25, and 30), "open reading frame derived from PS116" (claim 15) and "PS116 protein" (claim 38). Thus, Applicant has deleted this designation from the claims. It is respectfully requested that this rejection be withdrawn.

The Examiner further states claim 11 is vague and indefinite in the recitation “derived from a PS116 gene”. Thus, Applicant has deleted this language and respectfully requests that this rejection be withdrawn.

Claims 10-16, 25, 30, 33 and 35 are rejected under 35 U.S.C. § 112, first paragraph. The Examiner alleges that claim 10 is drawn to test kits comprising at least one polynucleotide “having at least 50% identity with a sequence selected from the group consisting of SEQ ID NO: 1-12, and fragments or complements thereof.”; claim 11 is drawn to a “purified polynucleotide or fragment thereof” “wherein said polynucleotide” “has at least 50% identity with a sequence selected from the group consisting of SEQ ID NO: 1-12, and fragments or complements thereof.”; claim 14 is drawn to these polynucleotides, “wherein said polynucleotide comprises a sequence encoding at least one PS116 epitope.”; claim 15 is drawn to recombinant expression systems “comprising a nucleic acid sequence,” “wherein said nucleic acid sequence has at least 50% identity with a sequence selected from the group consisting of SEQ ID NO: 1-12, and fragments or complements thereof.”; claim 25 is drawn to polynucleotides encoding polypeptides, “wherein said polypeptide comprises an amino acid sequence having at least 50% identity with an amino acid sequence selected from the group consisting of SEQ ID NO: 25, SEQ ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 29, and fragments or complements thereof.”; claim 30 is drawn to cells transfected with a nucleic acid sequence encoding at least one ... epitope, wherein said nucleic acid sequence is selected from the group consisting of SEQ ID NO: 1-12 and fragments or complements thereof.”; and claim 33 is drawn to a composition of matter comprising a “polynucleotide or fragment thereof, wherein has at least 50% identity with a polynucleotide selected from the group consisting of SEQ ID NO: 1-12 and fragments or complements thereof.” Thus, the Examiner concludes all of the above claims are drawn to nucleic acid molecules that are only at least 50% identical to the exemplified sequences of SEQ ID NO: 1-12 or minimally contain only portions of the novel nucleic acid molecules identified in the specification.

Therefore, Applicant has raised the percent identity from 50% to 70% and deleted “fragment” language in an effort to more clearly define the invention.

Claims 10-16, 25, 30, 33, 35, 38 and 39 under 35 U.S.C. § 101 and 35 U.S.C. § 112, first paragraph, because the claimed invention is not supported by either a specific or substantial asserted utility and, as discussed in the above paragraph claims 10-16, 25, 30,

33 and 35 are drawn to nucleic acid molecules that minimally contain only portions of the novel nucleic acid molecules identified in the specification. Additionally, the Examiner continues, claim 38 is drawn to a gene, or fragment thereof, which codes for a ... protein having an amino acid sequence with at least 50% identity to SEQ ID NO: 25" and claim 38 is drawn to a gene or fragment thereof, comprising DNA having at least 50% identity with SEQ ID NO: 11 or SEQ ID NO: 12, alleging the specification asserts no specific or substantial utility for this wide collection of polynucleotides. Based on the aforementioned amendments which substantially raise the percent identity and deleted "fragment" language, it is respectfully requested that his rejection be withdrawn.

Claims 11-16, 38 and 39 are rejected by the Examiner under 35 U.S.C. § 112, first paragraph. Specifically, claims 11-14 are drawn to polynucleotides "derived from a PS116 gene," claims 15-16 are drawn to "a nucleic acid sequence that includes an open reading frame derived from PS116," claim 38 is drawn to "a gene ... which codes for a PS116 protein," and claim 39 is drawn to "a gene ... comprising DNA having at least 50% identity with SEQ ID NO: 11 or SEQ ID NO: 12." Again, based on the aforementioned amendments which delete the "PS116" designation, this rejection is deemed moot.

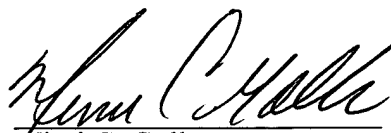
### CONCLUSION

In view of the aforementioned amendments and remarks, the aforementioned application is in condition for allowance and Applicant requests that the Examiner withdraw all outstanding objections and rejections and to pass this application to allowance.

Respectfully submitted,

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